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动物分类学报

A NEW SPECIES OF THE GENUS *EPITETRACNEMUS* GIRAULT (HYMENOPTERA, ENCYRTIDAE) FROM CHINA

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Abstract *Epitetracnemus shanghaiensis* sp. nov., reared from a Diaspididae species on *Prunus persica* collected from Shanghai, China, is described and illustrated. The type specimens are deposited in the Institute of Plant Physiology & Ecology, SIBS, Chinese Academy of Sciences, Shanghai.

Key words Hymenoptera, Encyrtidae, *Epitetracnemus*, new species, China

Epitetracnemus belonging to the tribe Habrolepidini, subtribe Habrolepidina of the subfamily Encyrtinae was established by Girault (1915) with *E. sexguttatipennis* as type species. Presently, a total of six species are recognized from all over the world: *E. cornis* Noyes *et* Ren (1987); *E. intersectus* (Fonscolombe, 1832); *E. lindingaspidis* (Tachikawa, 1963); *E. kosef* Li & Byun (2002); *E. japonicus* (Ishii, 1923); *E. sexguttatipennis* Girault (1915) (Li *et al*., 2002; Noyes and Ren, 1987; Zhang and Huang, 2004). Among them, three species are recorded from China: *E. cornis* Noyes *et* Ren (1987); *E. intersectus* (Fonscolombe, 1832); *E. lindingaspidis* (Tachikawa, 1963) (Zhang and Huang, 2004). The genus is similar to *Adelencyrtus* Ashmead (1900), just as Noyes and Hayat (1984) pointed out the two genera are not at all easy to distinguish and it is our view that further study will show that they should be considered synonymous. In this paper, *Epitetracnemus shanghaiensis* sp. nov. is reported from Shanghai, China.

The abbreviations used in this paper are listed in the following lines: F = Funicle; IZ, CAS = Institute of Zoology, Chinese Academy of Sciences; SHNU = Shanghai Normal University; SIBS = Shanghai Institutes for Biological Sciences.

Epitetracnemus **Girault**

Epitetracnemus Girault, 1915: 164. Type-species: *E. sexguttatipennis* Girault, by original designation.
Anabrolepis Timberlake, 1920: 431. Type-species: *Anabrolepis extranea* Timberlake, by original designation. Synonymy by Noyes and Hayat, 1984: 273.

Host Diaspididae (Homoptera, Coccoidea) (Xu and Huang, 2004; Zhang and Huang, 2004).

Distribution Cosmopolitan.

Key to species of Epitetracnemus **(females) based on the key of Noyes and Ren (1987).**

1. Forewing with both subapical hyaline spots separated from wing margin by darker setae ·············· E. sexguttatipennis **(Girault)**
Forewing with subapical hyaline spots extending to wing margin ·· 2
2. First four funicle segment short, each much shorter than either of the fifth or sixth ························· E. intersectus **(Fonscolombe)**
First three funicle segment short, each much shorter than any one of segments fourth to sixth ·· 3
3. Second funicular segment clearly longer than third funicular segments ·· E. shanghaiensis **sp. nov.**
First three funicular segments subequal in size ························ 4
4. Clava longer than funicle, funicle with only apical joint yellowish ·· E. kosef **Li** et **Byun**
Clava at least a little shorter than funicle ···························· 5
5. Mid tibia completely yellow, or nearly so; forewing with area between dorsal subapical hyaline spot and apex not darker than at apex ·· E. cornis **Noyes** et **Ren**
Mid tibia extensively dark brown; forewing with area between dorsal subapical hyaline spot and apex conspicuously darker than at apex ·· 6
6. Funicle with only apical joint yellowish ··································· ··· E. lindingaspidis **(Tachikawa)**
Funicle with three apical joints yellowish ······ E. japonicus **(Ishii)**

Epitetracnemus shanghaiensis **sp. nov.** (Figs. 1-5)

Female Body about 0.7 mm long, dark brown with a metallic blue or green sheen. Antenna with scape and pedicel dark brown, F1-F5 and clava yellow brown, F6 yellow white; forewing with an obvious infuscate pattern as in Fig. 5; fore legs with coxae, the most part of femur, basal half of tibia and telotarsus brownish or brown; mid legs with coxae, apical 2/3 of femur and basal half (excluding extreme base) of tibia and telotarsus dark brown or brown; hind legs with coxae dark brown, femur almost entirely dark brown, the most part (excluding apical and basal part) of tibia and telotarsus dark brown or brown; the rest part of legs yellow to yellowish white.

Head In dorsal view, about 2.1 × as wide as frontovertex; occipital margin more or less sharp; ocelli forming an acute angle, posterior ocellus nearly touching eye margin and separated from occipital margin by about twice its own diameter; antennal torulus separated from mouth margin by a little

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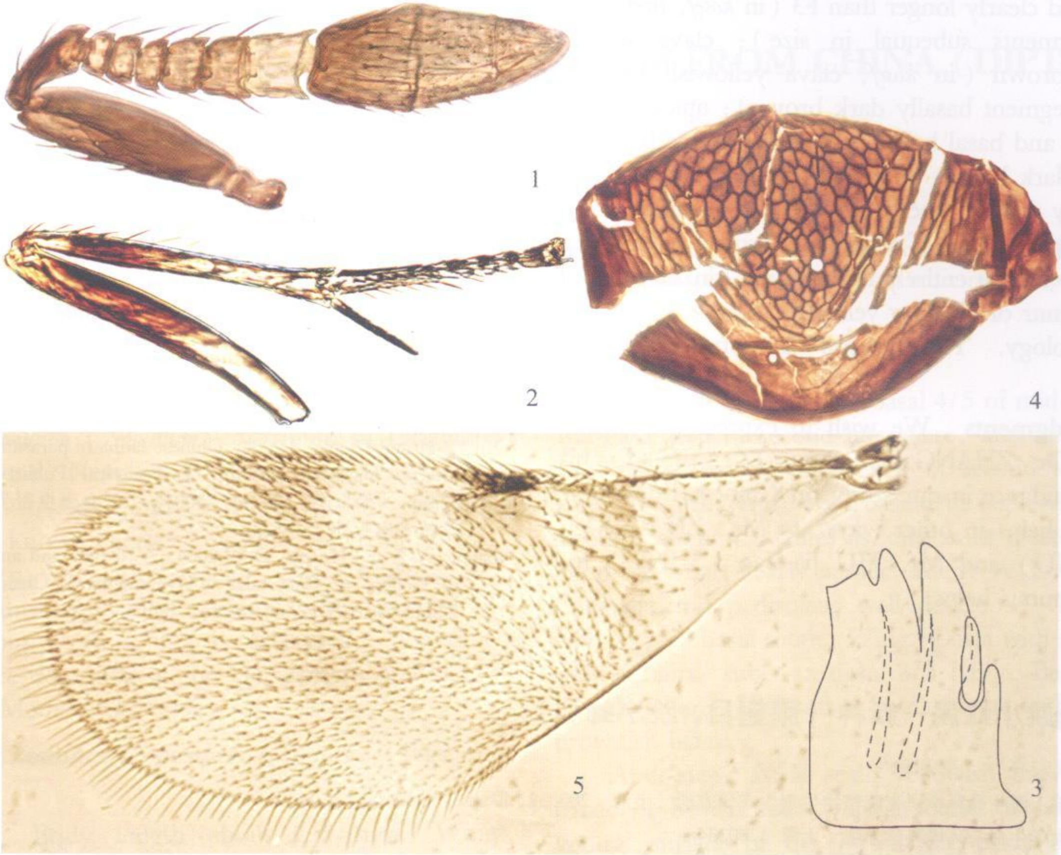

Figs 1-5 *Epitetracnemus shanghaiensis* sp. nov. (♀) 1. Antenna 2. Midleg 3. Mandible 4. Scutellum. 5. Forewing.

more than its own length, mandible as in Fig. 3.

Antenna (Fig. 1). Scape slightly broadened and flattened; pedicel somewhat longer than broad and slightly shorter than F1-F4 combined; funicle 6-segmented; F1-F3 conspicuously wider than long and each obviously shorter than any one of segments fourth to sixth; F4 and F5 subequal with each other in length and each a little wider than long; F6 nearly as long as broad; clava 3-segmented, somewhat expanded, evidently wider than F6, and a little longer than funicle.

Thorax. The dorsum of thorax flat; mesoscutum with reticulation varying from polygonal to subrectangular; scutellum (Fig. 4) with reticulations distinctly deeper than those on mesoscutum, and laterally more or less smooth; scutellum nearly as long as mesoscutum, and clearly wider than long.

Forewing (Fig. 5). About 2.6 × as long as broad; marginal vein clearly longer than broad and slightly longer than stigmal vein; postmarginal vein slightly shorter than stigmal vein; stigmal vein with sensillae approximately arranged in a line; linea calva not interrupted posteriorly.

Midleg (Fig. 2). Tibia spur about 0.36 times as long as corresponding tibia, and approximately subequal with basitarsus in length.

Gaster. Gaster about as long as thorax; cercal plates located in basal half of gaster; exserted part of ovipositor about 1/5 gaster length.

Relative measurements. Mid tibia length 100, antenna scape length 38, mid tibia spur length 36, ovipositor length 147, ovipositor sheath length 39.

Male. Generally similar to female, about 0.7 mm long. Body dark brown with a metallic luster. Antenna with scape generally yellow, the superior margin of pedicel dark brown, and the rest yellow brown; scape, pedicel and funicle all short; funicle 2-segmented, ring-like, and about 1/2 pedicel length; clava entire, banana-like, and very long. Gaster slightly short than thorax; cercal plates located in the basal half of gaster; the exserted part of genitalia about 1/4 to 1/3 gaster length.

Host. Diaspididae (Homoptera, Coccoidea).

Holotype ♀, China, Shanghai City, 11 June 2009, ex Diaspididae, coll. LI Hong-Liang. Paratypes 1♀, 5♂♂, same data as holotype.

Comments. *E. shanghaiensis* is similar to *E. kosef* Li *et* Byun (2002), but it can be separated from the latter by the following funicle with F2 slightly longer than F1 and clearly longer than F3 (in *kosef*, first three funicle segments subequal in size); clava wholly yellowish brown (in *kosef*, clava yellowish brown, proximal segment basally dark brown); apical 2/3 of mid femur and basal half (excluding extreme base) of mid tibia dark brown or brown (in *kosef*, femur and tibia mostly yellow, except middle part of femur and a narrow ring on base of tibia dark brown); hind leg with femur almost entirely dark brown (in *kosef*, basal third of femur of hind leg yellow).

Etymology. This species is named after its location.

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中国斑翅跳小蜂属一新种（膜翅目，跳小蜂科）

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摘 要 记述了育自上海桃树上 1种盾蚧中的斑翅跳小蜂属 1新种：上海斑翅跳小蜂 *Epitetracnemus shanghaiensis* sp. nov.。文中给出了新种的形态特征图和该属分种检索表。研究标本保存于中国科学院上海生命科学研究院植物生理生态研究所。

上海斑翅跳小蜂，新种 Epitetracnemus shanghaiensis **sp. nov.**（图 1~5）

新种（雌）与 *Epitetracnemus kosef* Li & Byun, 2002 相似。两者的区别在于：新种索节第 2节稍长于第 1节，明显长于第 3节；棒节浅黄褐色；中足腿节端部 2/3、胫节基半部（除最基部）深褐色或褐色；后足腿节几乎全部深褐色。而 *Epitetracnemus kosef* 索节前 3节大小近相等；棒节基部深褐色，余为浅黄褐色；中足腿节中部、胫节基部一窄环深褐色，其余黄色；后足腿节基部 1/3黄色。

正模 ♀，上海，2009-06-11，李宏亮采。副模：1♀，5♂♂，上海，2009-06-11，李宏亮采。

词源：新种名出自标本采集地上海。

关键词 膜翅目，跳小蜂科，斑翅跳小蜂属，新种，中国.

中图分类号 Q969.546.4